

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): ~~Process~~ A process for the production of a plastics article with a microstructured surface via production of a composite ~~composed~~ comprised of a backing layer ~~composed~~ comprised of a thermoplastic or thermoelastic with one or more structure layers,

~~characterized in that~~ wherein

the structure layer(s) is/are ~~composed~~ comprised of from 1 to 100% by weight of a polymethacrylate moulding composition which comprises from 80 to 100% by weight of free-radical-polymerized methyl methacrylate units and from 0 to 20% by weight of other comonomers capable of free-radical polymerization and which has an average (weight-average) molar mass  $[[M_w]]$   $M_w$  of from 30 000 to 70 000 g/mol

and, where appropriate, is present in a mixture with up to 99% by weight of a polymethacrylate moulding composition which is ~~composed~~ comprised of from 80 to 100% by weight of free-radical-polymerized methyl methacrylate units and from 0 to 20% by weight of other comonomers capable of free-radical polymerization and which has an average (weight-average) molar mass  $[[M_w]]$   $M_w$  of from 90 000 to 200 000 g/mol

and the structure layer(s) obtain microstructuring via known structuring processes, after production of the composite.

Claim 2 (Currently Amended): ~~Process~~ The process according to Claim 1, ~~characterized in that~~ wherein the plastic of the structure layer has a viscosity number ( $\eta_{sp/c}$ ) of from 25 to 50 ml/g, measured in chloroform to ISO 1628 Part 6.

Claim 3 (Currently Amended): ~~Process~~ The process according to Claim 1, ~~wherein or~~  
~~2, characterized in that~~ the composite of backing layer and structure layer is generated via  
coextrusion, application of the structure layer to the backing layer by lamination, or  
application of the structure layer to the backing layer by lacquering.

Claim 4 (Currently Amended): ~~Process~~ The process according to ~~one or more of~~  
~~Claims 1 to 3, characterized in that~~ Claim 1, wherein the polymethyl methacrylate moulding  
compositions of the structure layer comprise, as other comonomers, C<sub>1</sub>-C<sub>4</sub>-alkyl  
(meth)acrylates, ~~in particular methyl acrylate, ethyl acrylate or butyl methacrylate.~~

Claim 5 (Currently Amended): ~~Process~~ The process according to ~~one or more of~~  
~~Claims 1 to 4, characterized in that~~ Claim 1, wherein the thickness of the structure layer is in  
the range from 1 to 1000  $\mu\text{m}$ .

Claim 6 (Currently Amended): ~~Process~~ The process according to ~~one or more of~~  
~~Claims 1 to 5, characterized in that~~ Claim 1, wherein the dimensions of the geometries of the  
microstructures are in the range from 1 to 1000  $\mu\text{m}$ .

Claim 7 (Currently Amended): ~~Process~~ The process according to ~~one or more of~~  
~~Claims 1 to 6, characterized in that~~ Claim 1, wherein the height:width aspect ratios of the  
microstructures are from 0.3 to 10.

Claim 8 (Currently Amended): ~~Process~~ The process according to ~~one or more of~~  
~~Claims 1 to 7, characterized in that~~ Claim 1, wherein, after the discharge of a coextrudate  
~~composed~~ comprised of the melts of the backing layer and of the structure layer from the

extrusion die of an extrusion system, the microstructures are embossed into the structure layer(s) in the molten state in an attached polishing-roller stack, by means of one or more embossing rollers.

Claim 9 (Currently Amended): ~~Process~~ The process according to ~~one or more of Claims 1 to 7, characterized in that~~ Claim 1, wherein the microstructures are transferred via subsequent hot embossing into the previously solidified structure layer(s).

Claim 10 (Currently Amended): ~~Process~~ The process according to ~~one or more of Claims 1 to 9, characterized in that~~ Claim 1, wherein the backing layer is ~~composed~~ comprised of a polymethyl methacrylate plastic or of a plastic compatible with polymethyl methacrylate.

Claim 11 (Currently Amended): ~~Process~~ The process according to ~~one or more of Claims 1 to 9, characterized in that~~ Claim 1, wherein the backing layer is ~~composed~~ comprised of a plastic which is incompatible with, or has poor compatibility with, polymethyl methacrylate, but is equipped with (an) intermediate layer(s) which has been coextruded, laminated, or applied by lacquering, and which promotes adhesion.

Claim 12 (Currently Amended): ~~Process~~ The process according to ~~one or more of Claims 1 to 9, characterized in that~~ Claim 1, wherein the backing layer is ~~composed~~ comprised of a plastic which is incompatible with, or has poor compatibility with, polymethyl methacrylate, but is not equipped with any intermediate layer which has been coextruded, laminated, or applied by lacquering, and which promotes adhesion, and, after the

microstructure has been applied, the composite is separated in order to obtain the microstructured structure layer alone.

Claim 13 (Currently Amended): ~~Plastics~~ A plastics article which can be produced by ~~[[a]] the process according to one or more of Claims 1 to 12 as claimed in Claim 1.~~

Claim 14 (Currently Amended): ~~Plastics~~ The plastics article according to Claim 13, ~~characterized in that it~~ wherein said plastics article is a composite ~~composed~~ comprised of a backing layer and of one or more structure layers with microstructured surfaces.

Claim 15 (Currently Amended): ~~Plastics~~ The plastics article according to Claim 13, ~~characterized in that it~~ wherein said plastics article is ~~composed~~ comprised of a structure layer with a microstructured surface and ~~can be produced according to Claim 12~~ the backing layer is comprised of a plastic which is incompatible with, or has poor compatibility with, polymethyl methacrylate, but is not equipped with any intermediate layer which has been coextruded, laminated, or applied by lacquering, and which promotes adhesion, and, after the microstructure has been applied, the composite is separated in order to obtain the microstructured structure layer alone.

Claim 16 (Currently Amended): ~~Plastics~~ The plastics article according to ~~one or more of Claims 13 to 15, characterized in that it~~ Claim 13, wherein said plastics article is a simple sheet, a corrugated sheet, a panel having cavities, ~~in particular a twin web sandwich panel, a multiweb sandwich panel, or a lattice panel,~~ or a tube or rod, the shape of which is angular or round, elliptical or oval.

Claim 17 (Canceled).

Claim 18 (New): A method for modifying a surface of an object, said method comprising:

placing said plastics article according to Claim 13

on a surface of a vehicle where air water flows over said surface of said vehicle to reduce friction; or

on a line or a container where fluids flow at high speeds to reduce friction; or

on a container and mixing one or more fluids in said container to control mixing of said one or more fluids; or

on a surface of a first article to produce a surface having a modified acoustic property;

or

on a surface of a second article to produce a surface having reduced adhesion of contaminants; or

on a surface of a third article to produce antimicrobial surface; or

on a surface of a fourth article to produce a surface which directs light, conducts light, refracts light, diffusely scatters light, reflects light, does not reflect light, or performs a mixture of functions thereof.